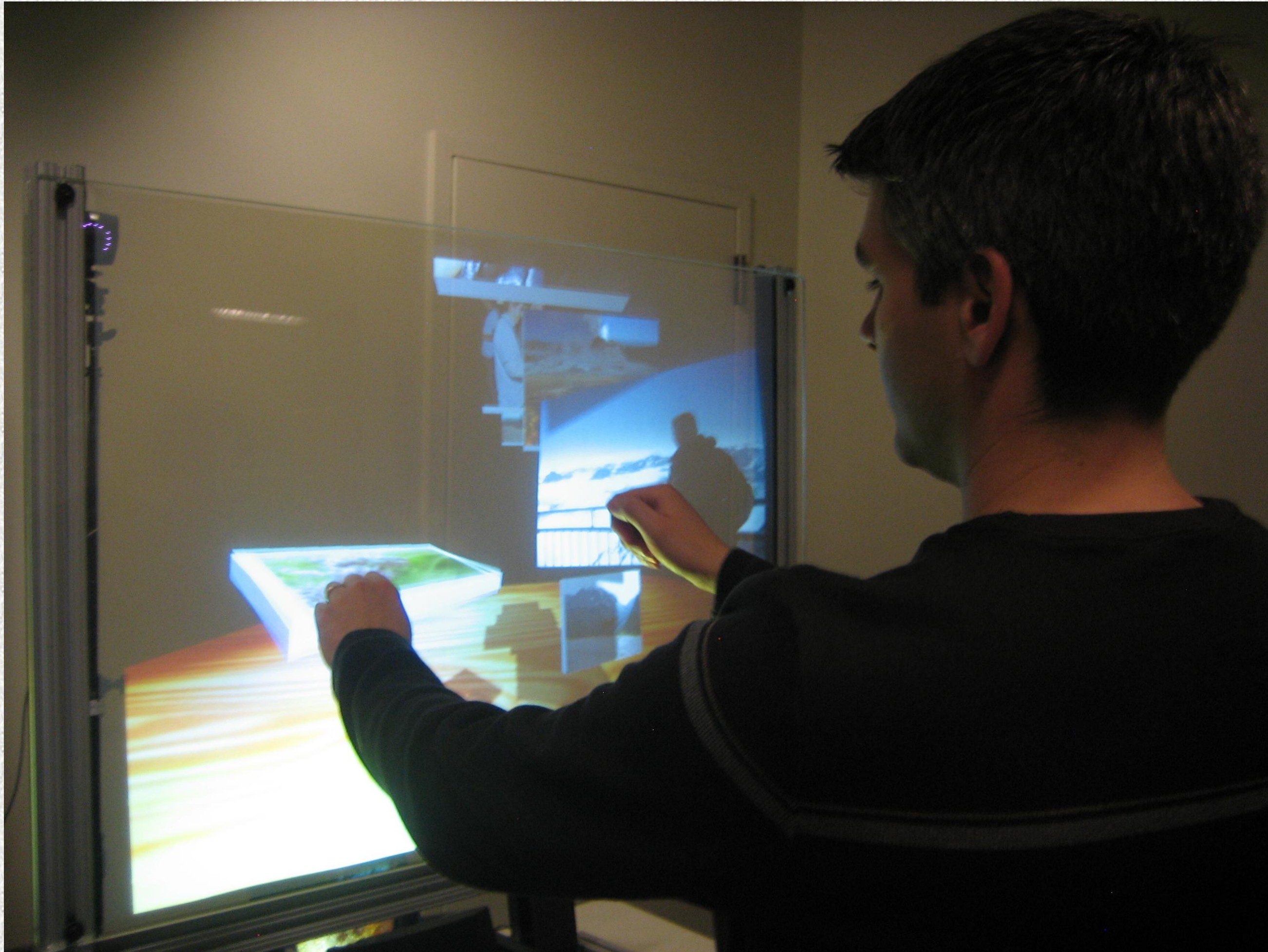


# DepthTouch

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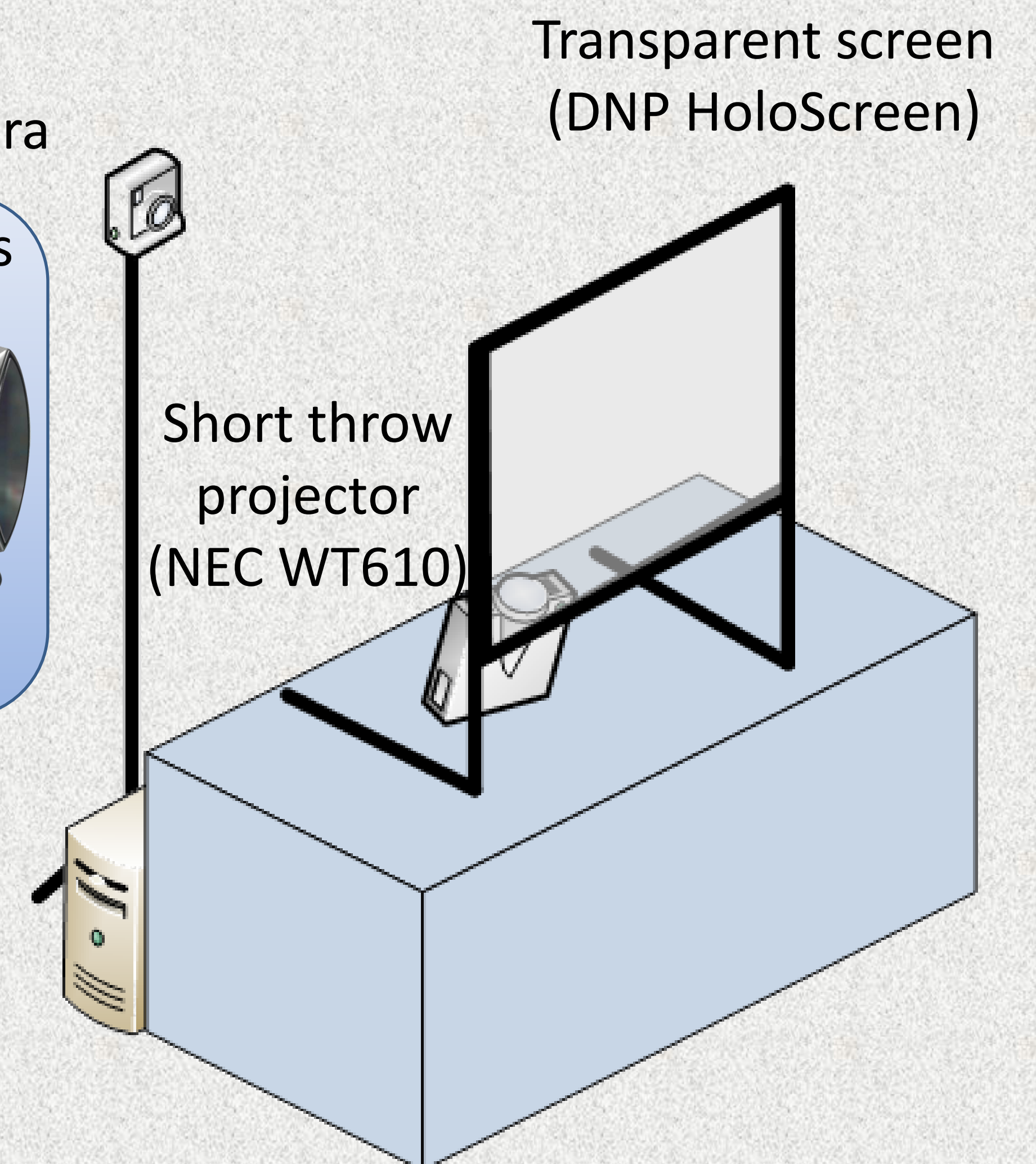
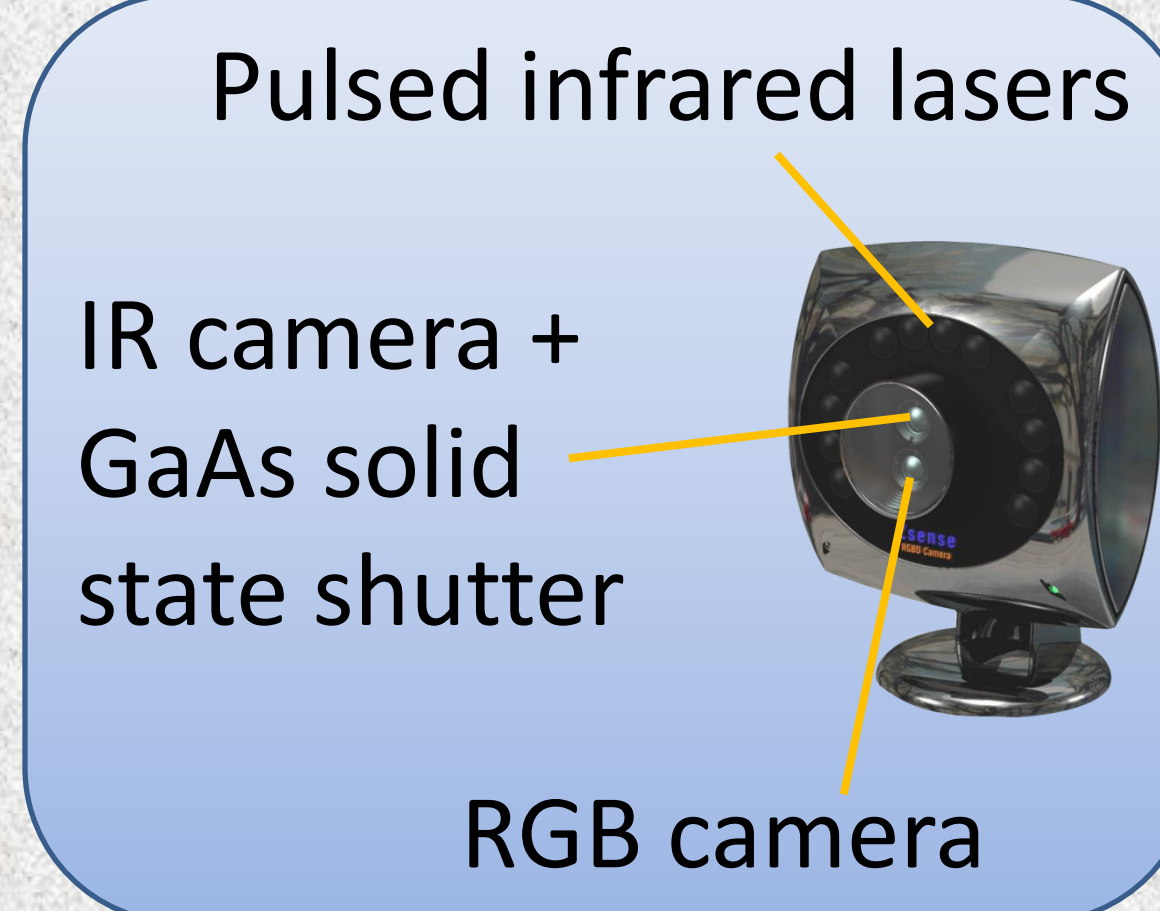
Using Depth-Sensing Camera to Enable Freehand Interactions On and Above the Interactive Surface



*DepthTouch* is an exploratory interactive system that combines the benefits of multi-touch-sensitive surface with the ability to interact in the hover space in front of the surface.

## Hardware

3DV ZSense depth camera



## Perspective 3D View

Depth cues: head-position-based perspective 3D view, motion parallax, and shadows.



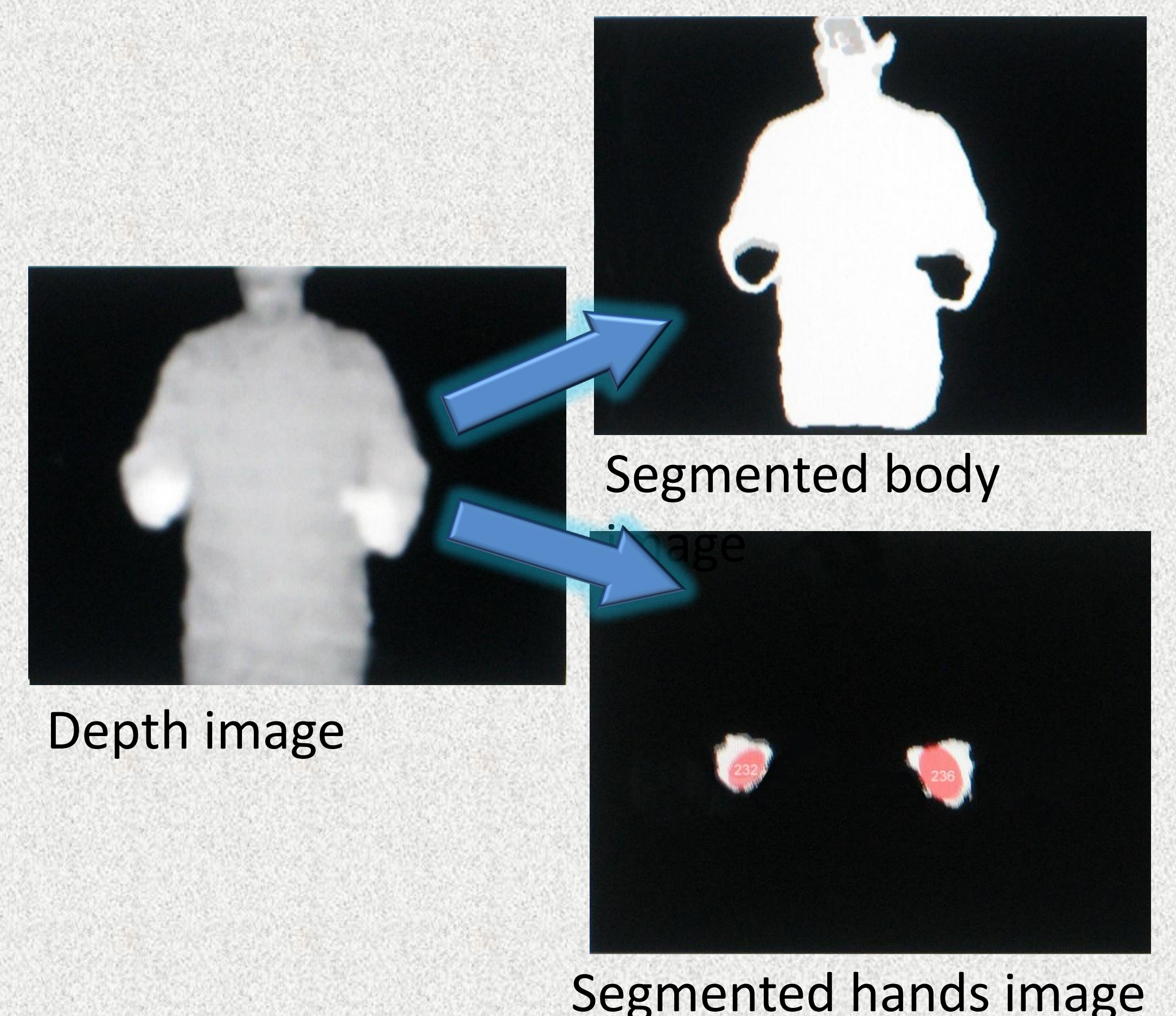
A view from the left.



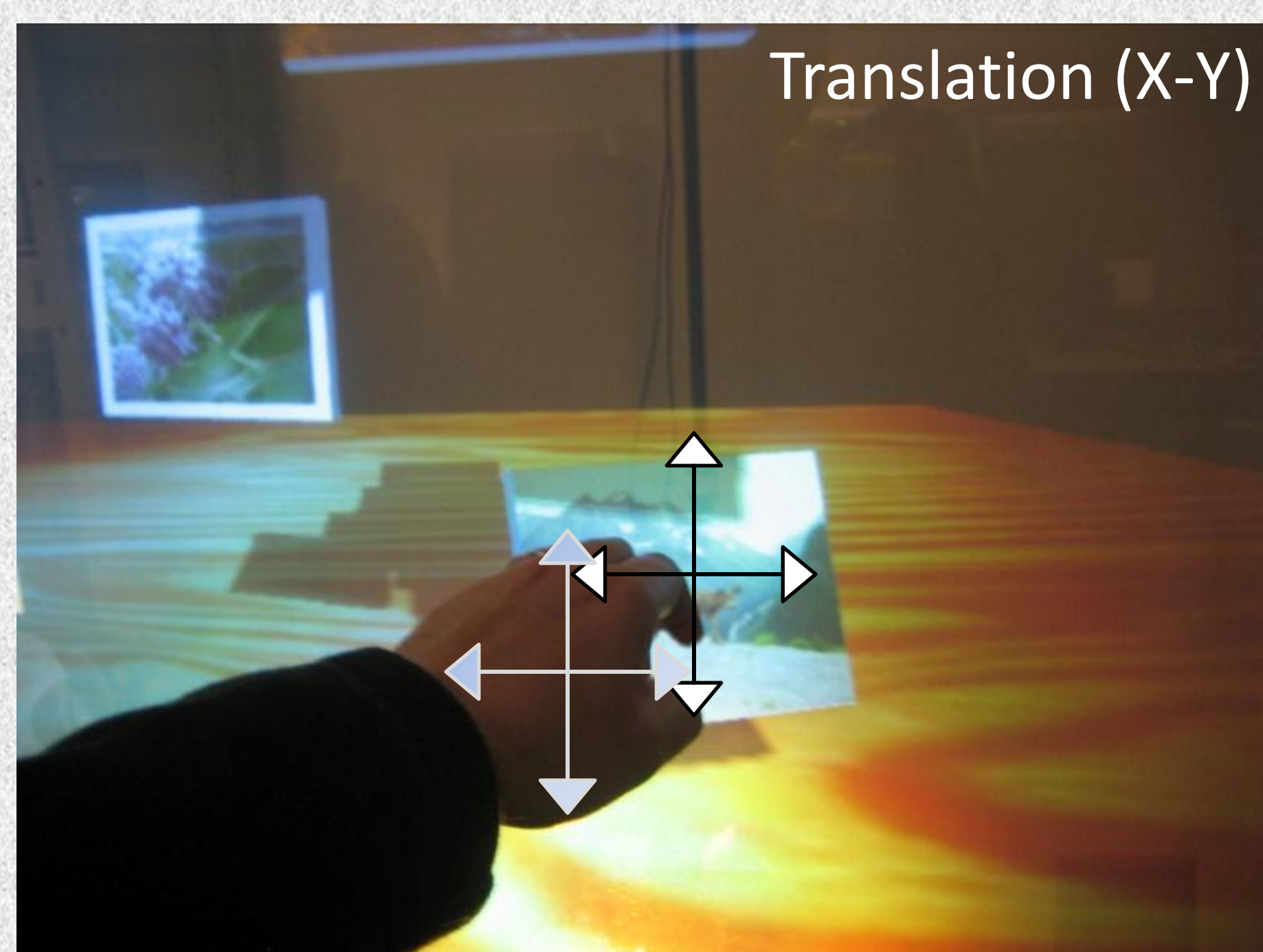
A view from the middle.

## Tracking by Segmentation

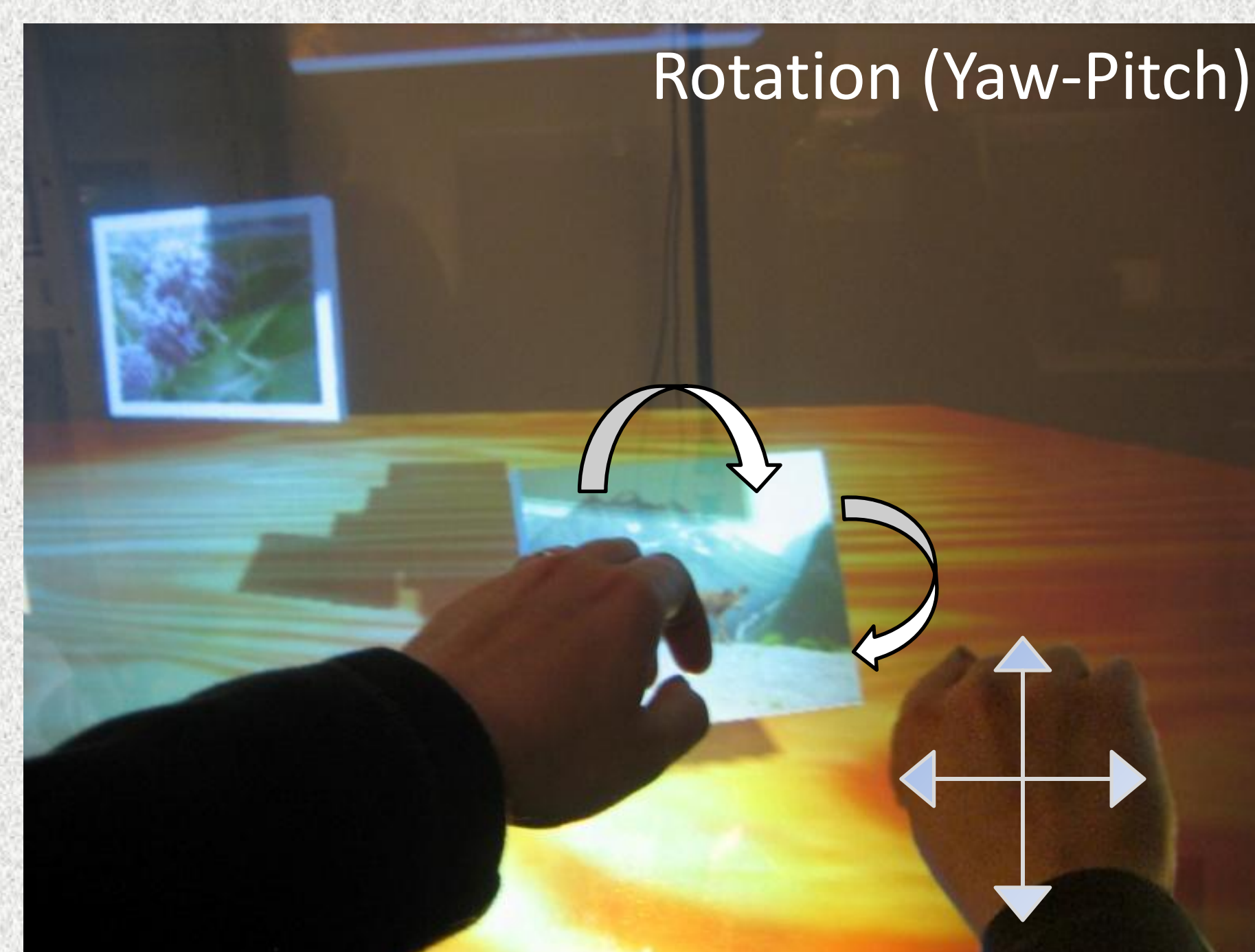
Tracked body parts: head, hands, torso



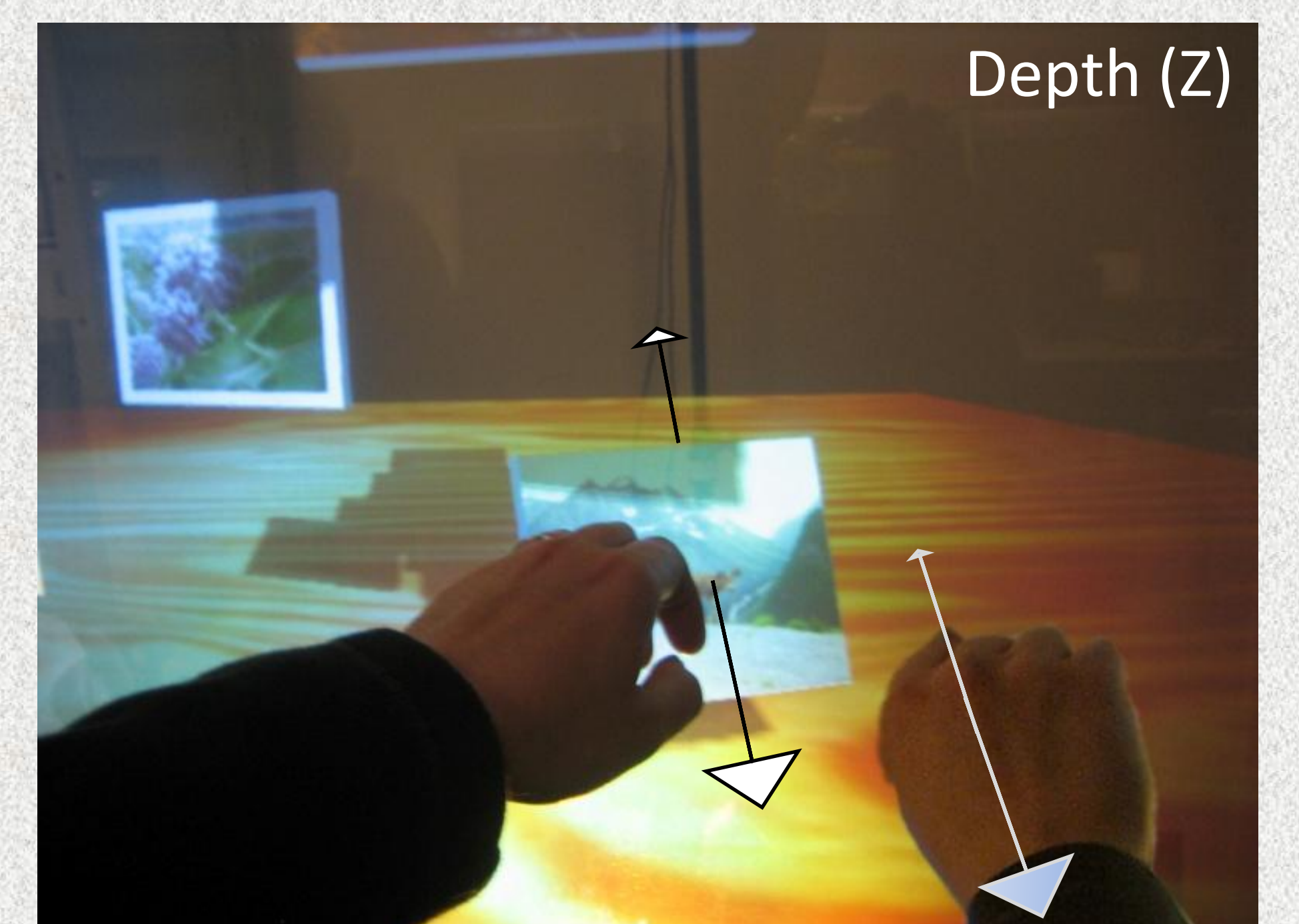
## Hover Space Interactions



By touching the surface, the user can select an object and drag it in plane.



While the object is held with the first hand, it can be rotated in place by moving the second hand in plane above the surface.



The object can also be pushed closer or further away by moving the second hand closer or further away from the body.